



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,495	02/20/2004	Yung-Cheng Chen	N1085-00251 [TSMC2003-083]	2148
54657 7590 01/28/2008 DUANE MORRIS LLP IP DEPARTMENT (TSMC) 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196			EXAMINER NORTON, JENNIFER L	
			ART UNIT 2121	PAPER NUMBER
			MAIL DATE 01/28/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

98

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/783,495	<b>Applicant(s)</b> CHEN ET AL.	
	<b>Examiner</b> Jennifer L. Norton	<b>Art Unit</b> 2121	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 January 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
 b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: \_\_\_\_\_.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
 13. ☐ Other: \_\_\_\_\_.

DAVID VINCENT 11/17/08  
 SUPERVISORY PATENT EXAMINER

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments, see Remarks pgs. 2-7, filed 02 January 2008 with respect to claims 1-22 under 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

With respect to the Applicant's arguments that the prior art teaches away from Applicant's system; the Examiner respectfully disagrees. See MPEP 2123, recited below for convenience:

MPEP 2123 states:

"Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) (The invention was directed to an epoxy impregnated fiber-reinforced printed circuit material. The applied prior art reference taught a printed circuit material similar to that of the claims but impregnated with polyesterimide resin instead of epoxy. The reference, however, disclosed that epoxy was known for this use, but that epoxy impregnated circuit boards have "relatively acceptable dimensional stability" and "some degree of flexibility," but are inferior to circuit boards impregnated with polyesterimide resins. The court upheld the rejection concluding that applicant's argument that the reference teaches away from using epoxy was insufficient to overcome the rejection since "Gurley asserted no discovery beyond what was known in the art." 27 F.3d at 554, 31 USPQ2d at 1132.) Furthermore, "[t]he prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004)."

In regards to Applicant's argument that U.S. Patent Publication No. 2004/0092047 (hereinafter Lymberopoulous) does not teach, "using a CD measurement to control exposure energy", the Examiner recognizes the Applicant has not accounted for the combination of U.S. Patent No. 5,409,538 (hereinafter Nakayama) and Lymberopoulous under 35 U.S.C 103(a) for this limitation as set forth in the Final Office Action, mailed on 05 November 2007.

With respect to the Applicant's arguments that it would not have been obvious to combine the prior art of Nakayama and Lymberopoulous; the Examiner respectfully disagrees.

Nakayama teaches controlling the exposure energy with a feedback process control signal (col. 6, lines 14-20 and 48-55, col. 15, lines 12-21 and Fig. 18), and controlling the exposure energy with a feed forward process control signal of a compensation amount that compensates for wafer thickness variations (col. 6, lines 48-55 and col. 15, lines 14-41, i.e. "the results of the correction"). Nakayama further teaches, measuring optical properties of a film such as reflectivity, refractive index, transmittance, polarization, spectral transmittance, and absorption coefficient" (As indicated by the Applicant on pg. 2, lines 24-26 of the Remarks).

Lymberopoulous teaches to a patterned wafer substrate (pg. 3, par. [0028]), a wafer measuring tool where the CD is optically measured on a patterned photoresist layer (pg. 4, par. [0036]) and critical dimension being one of a width, a spacing and an opening of the patterned wafer substrate (pg. 1, par. [0007]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nakayama to include a patterned wafer substrate, a wafer measuring tool where the CD is optically measured on a patterned photoresist layer and critical dimension being one of a width, a spacing and an opening of the patterned wafer substrate to provide a simple, cost-effective methodology for fast and meaningful identification and correction of CD variation without significantly compromising throughput (pg. 2, par. [0013]).

Hence, claims 1-22 stand rejected under 35 U.S.C. 103(a) as set forth in the Final Office Action mailed on 05 November 2007.